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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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08/905,701 08/04/97 ISOM

TM01/0103

EXAMINER
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| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2151 | 17 |

DATE MAILED:

01/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| | | | |
|------------------------------|-----------------|------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 08/905,701 | Fred Steven Isom | |
| | Examiner | Art Unit | |
| | George L. Opie | 2151 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) Responsive to communication(s) filed on 10/24/00.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 & 29-41 is/are pending in the application.
 - 4a) Of the above claim(s) is/are withdrawn from consideration.
- 5) Claim(s) is/are allowed.
- 6) Claim(s) 1-25 & 29-41 is/are rejected.
- 7) Claim(s) is/are objected to.
- 8) Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - a) All b) Some * c) None of the CERTIFIED copies of the priority documents have been:
 1. received.
 2. received in Application No. (Series Code / Serial Number) _____.
 3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- | | |
|---|--|
| 14) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____ |
| 15) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 16) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 19) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The request filed on 10/24/00 for a Continued Prosecution Application (CPA) under 37CFR1.53(d) based on parent Application No. 08/905,701 is acceptable. An action on the CPA follows.

1. Request for copy of Applicant's response on floppy disk:
Please help expedite the prosecution of this application by including, along with your amendment response in paper form, an electronic file copy in WordPerfect, Microsoft Word, or in ASCII text format on a 3½ inch IBM format floppy disk. Please include all pending claims along with your responsive remarks. Only the paper copy will be entered -- your floppy disk file will be considered a duplicate copy. Signatures are not required on the disk copy. The floppy disk copy is not mandatory, however, it will help expedite the processing of your application. Your cooperation is appreciated.
2. The U.S. Patents used in the art rejections below have been provided as text documents which correspond to the U.S. Patents. The relevant portions of the text documents are cited according to page and line numbers in the art rejections below. For the convenience of Applicant, the cited sections are highlighted in the *text documents*. Consistent with Office procedure, the U.S. Patents corresponding to the *text documents* are also included with this action.

3. Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al (U.S. Patent 5,623,592) in view of "Fabrik: A Visual Programming Environment", Ingalls et al., Sep. 25, 1988, Association for Computing Machinery.

As to claim 1, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, p12 25-36) comprising:

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- a) placing task objects (copying or moving icons[representing task objects], p7 4-11) in a directional field (icon sequence region 806, p12 10-17) having a changeable directional attribute (sequencing rule may be up-to-down or down-to-up, p13 11-18) wherein said task objects represent the tasks to be performed by said computer; and
- b) sequencing (perform the operations ... in the icon sequence, p12 25-36) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the operations will be performed, Id.) and the directional attribute of the directional field (sequencing rule, p13 11-18).

Carlson does not explicitly teach the limitation of a user changeable directional attribute.

Ingalls (§4, p 180-81) teaches a data flow feature that enables a user to select/change the directional operation in a visual programming environment. It would have been obvious to combine the bidirectional behavior support which facilitates user directional (data flow) changes as taught by Ingalls with Carlson's teachings because the capability to change the direction of an operation provides power and flexibility to a user in a visual task environment.

As to claim 2, Carlson teaches (icon is inserted into the icon sequence at a position dependent on when the operation is to be performed relative to other operations, p20 19-23) which corresponds to resequencing objects by changing the relative spatial location of the objects in the field.

As to claim 3, Carlson teaches (sequencing rule, p13 11-18) which corresponds to the step of selecting a directional attribute for the directional field. It would have been an obvious modification of the sequencing rule as taught by Carlson to provide a selection for the sequencing (equivalent to the direction) rule.

As to claims 4-6, "Official Notice" is taken that modifiable task object properties are used to specify operations to be performed and inclusion/exclusion in the sequence field is well known in the art (MPEP2144.03). It would have been obvious to combine the customary control features for task object management with Carlson's iconic programming because the ability to specify object processes/relationships gives users' greater command over details in the visual development environment.

As to claims 7-13, Carlson teaches (p14 9-26) kinetic and stacker icons which correspond to the recitations regarding the master objects, task objects, and the associations therein. It would have been obvious to modify the icon types as taught by Carlson to serve as various derived objects for structure and scope purposes.

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As to claim 14, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, p12 25-36) comprising:

- a) displaying on a computer display a user interface having a directional field (icon sequence region 806, p12 10-17)
- b) placing in response to user input, task objects in said directional field (PLACING ICONS ON THE TIME LINE, p13 ln19 et seq.) wherein said task objects (Icons, p6 45-51) represent the tasks to be performed by said computer (iconic programming process, Id.)
- c) selecting a directional attribute for said directional field (sequencing rule may be up-to-down or down-to-up, p13 11-18)
- d) sequencing (perform the operations ... in the icon sequence, p12 25-36) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the operations will be performed, p12 10-17) and the directional attribute of the directional field (sequencing rule, p13 11-18).

Carlson does not explicitly teach the limitation of a user selecting the directional attribute.

Ingalls (§4, p 180-81) teaches a data flow feature that enables a user to select/change the directional operation in a visual programming environment. It would have been obvious to combine the bidirectional behavior support which facilitates user directional (data flow) changes as taught by Ingalls with Carlson's teachings because the capability to change the direction of an operation provides power and flexibility to a user in a visual task environment.

As to claims 15-25 note the discussions of claims 2, & 4-13 respectively.

5. Claims 29-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al (U.S. Patent 5,623,592) in view of Keller et al. (U.S. Patent 5,767,852).

As to claim 29, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, p12 25-36) comprising:

- a) placing task objects (copying or moving icons[representing task objects], p7 4-11) in a directional field having a directional attribute (icon sequence region 806, p12 10-17) wherein said task objects represent the tasks to be performed by said computer; and

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b) sequencing (perform the operations ... in the icon sequence, p12 25-36) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the operations will be performed, p12 10-17) and the directional attribute of the directional field (sequencing rule, p13 11-18).

Carlson does not explicitly disclose a directional field having at least two dimensions.

Keller teaches the coordinates of a region 284, ... to include additional variables for higher dimensional spaces, p5 23-42 which corresponds to a directional field having at least two dimensions. It would have been obvious to combine Keller's teachings with Carlson because the multidimensional regional relationships enable more control/direction for task management specificity.

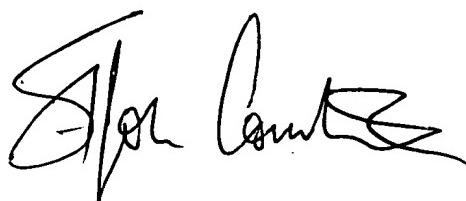
As to claims 30-41 note the discussions of claims 2-13 above.

6. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure. Each reference disclosed below is relevant to one or more of the Applicant's claimed invention.

"Widening 'world' of neural nets" Johnson, R. Colin (Electronic Engineering Times , n756 , p35, July 26, 1993) which teaches the automatic connection of components in a visual programming environment;

U.S. Patent No. 5,850,548 to Williams which teaches the operations of components/iconic tasks with respect to scope and type functioning.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie at (703) 308-9120 or via e-mail at George.Opie@uspto.gov. Internet e-mail should not be used where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the Applicant. Sensitive data includes confidential information related to patent applications.



John L. Clark
1-2-2001